

the effect on the wholesomeness of Texas seafoods in the event that the oil invaded the bays and estuaries. The Department's Division of Food and Drugs conducted tests to determine if any seafood had been contaminated by the oil spill. No contamination was reported.¹⁰

The Texas Railroad Commission deployed remote weather stations and arranged for storage and salvage of recovered oil.⁹

The Texas Department of Highways and Public Transportation prepared disposal sites, closed passes, participated in cleanup of the beaches, transferred oil debris to its final disposal site, and constructed access roads where needed.⁹

The primary role of the Texas Parks and Wildlife Dept. was to monitor the fish and wildlife populations. The Department chemists also aided in bioassays and decisions on oil containment and cleanup.¹¹

The Texas Air Control Board conducted burning tests as an alternative to oil removal technique.⁹

The Attorney General's office provided assistance in legal questions arising from the oil spill and the cleanup operations.⁹

RESEARCH

Texas beaches, bays and estuaries are irreplaceable assets of great value to the Texas coastal economy. In order to protect this valuable asset for the future, basic research is needed now to assess the oil spill of last summer.

Key processes¹² of the coastal ecosystem which must be understood include:

- A. Productivity
 - carbon uptake
 - nitrogen uptake
 - fresh water input
 - input from swamps and marshes
- B. Geochemical cycles
 - metals
 - pollutants
 - organics from rivers
- C. Food web analyses
 - benthic role
 - seagrass role

- plankton role
 - nitrogen fixation and nitrogen cycle
- D. Physical and geological
- sedimentation rates
 - water movement.

All existing baseline studies which contribute directly to long range key processes studies should be updated at the time of peak activity for all major disasters. The different samplings done on the IXTOC I spill and the Burmah Agate should take into account the existing Bureau of Land Management Outer Continental Shelf baseline studies. The sampling should be related to the USGS/BEG Core Sediments Archives using the same precise sampling latitude/longitude grid to which the original sampling is tied and to which other sampling also can then be related by latitude/longitude points.

A baseline is the norm against which the plus or minus effects of an impact can be measured using samplings taken at the time of "peak activity" and taken again after the fact. Four or five such major base line studies for Texas coastal waters and the outer continental shelf were completed from 1975 to 1977.¹³

Texas has a cooperative pair of resources which is unique in the nation. The State has the Texas Natural Resources Information System (TNRIS), and the universities have their private, non-profit consortium, the Texas System of Natural Laboratories, Inc. (TSNL). (See Appendix F)

The following document prepared by TSNL will consist of the International base line data coding system; profiles of an oil spill with a related one for fish and shrimp species; and also the biological aspects relating to the IXTOC I oil spill.